LOUISIANA
Conservationist

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Warm-Weather Blooms
Spring and Early Summer Wildflowers

Diving the Depths:
Exploring a Coral Reef

Dedicated to the conservation and restoration of Louisiana's natural resources.
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Comments

By James Jenkins, Jr., Secretary

National Fishing and Boating Week is slated for June 1-10. This week signals the onset of the busy boating season, emphasizing the increased use of our waterways and a heightened awareness for safe boating practices.

By the time this week long celebration arrives, Wildlife and Fisheries will have already recorded more than 14 boating accidents and 10 fatalities. Last year Louisiana had 242 boating accidents, 169 injuries and 44 fatalities. This is a record high for boating accidents reported in our state. The Department's Boating Safety Education Program works year round to provide free classes in basic boating skills, with these efforts extended by the U.S. Power Squadrons and the U.S. Coast Guard Auxiliary. Despite this outreach, high accident figures continue to plague us.

Boating accidents are defined as accidents with injuries that require medical attention beyond first aid, fatalities and damage over $200. There are approximately 330,293 registered boats in Louisiana and that number increases in spring and summer as visitors trailer or float into our waterways. Keep in mind that registered boats reflects the number of boats powered by machinery and sailboats over 12 feet in length. For all these hundreds of thousands of boats there is no special training required by law for boat operators. Any person can purchase a boat and take to the water without special training or previous experience.

Louisiana does not have mandatory safe boating education. It has been addressed in the Louisiana Legislature for many years and will again be addressed in this current session. By the time this issue goes to press, the Legislature will have been in session for approximately five weeks. Two Senate Bills have been filed regarding mandatory safe boating education and higher boat operator age limits. SB 1681 addresses mandatory safe boating education and SB 233 raises the boat operator age from 13 to 16. Should the legislature decide to make boating safety education mandatory, we will join the ranks of 32 other states with mandatory boating safety education.

Although our state does not mandate education classes, we do have mandatory equipment and safety devices required in our state laws. Equipment such as proper running lights and personal flotation devices (PFDs) are necessary for compliance. Like cars, boats have rules of the road too and proper running lights and right-of-way rules are essential for a safe boating trip. So are PFDs. A very large percentage of fatalities rescued from boating accidents would be alive today if they worn life jackets. The slogan "It doesn't work if you don't wear it" couldn't hold more truth.

With all this doom and gloom talk about boating accidents, we need to remember that our waterways are one of our state's biggest assets. The beauty and resources they offer is what attracts so many people. To preserve this asset and the enjoyment of so many, we need to make it safe and pleasurable. For now, safe boating classes are optional and offered free of charge all year. Please take the time for one of these classes. Information on class schedules can be obtained from any LDWF regional office or by calling 1-800-268-7853, from LDWF's website (www.wlf.state.la) and from the U.S. Power Squadron or the U.S. Coast Guard at 1-800-368-5647.

Let's enjoy our waterways this summer and keep it safe at the same time. Support safe boating skills. It will benefit everyone.

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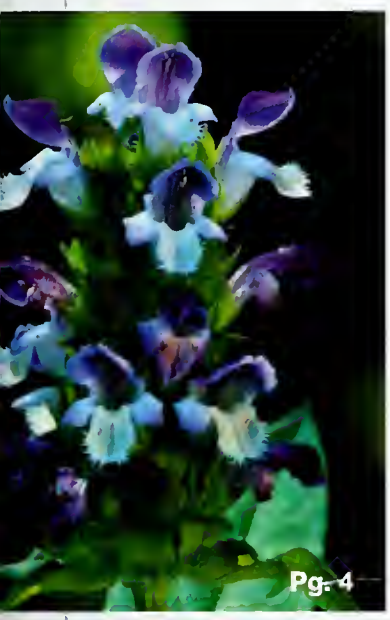

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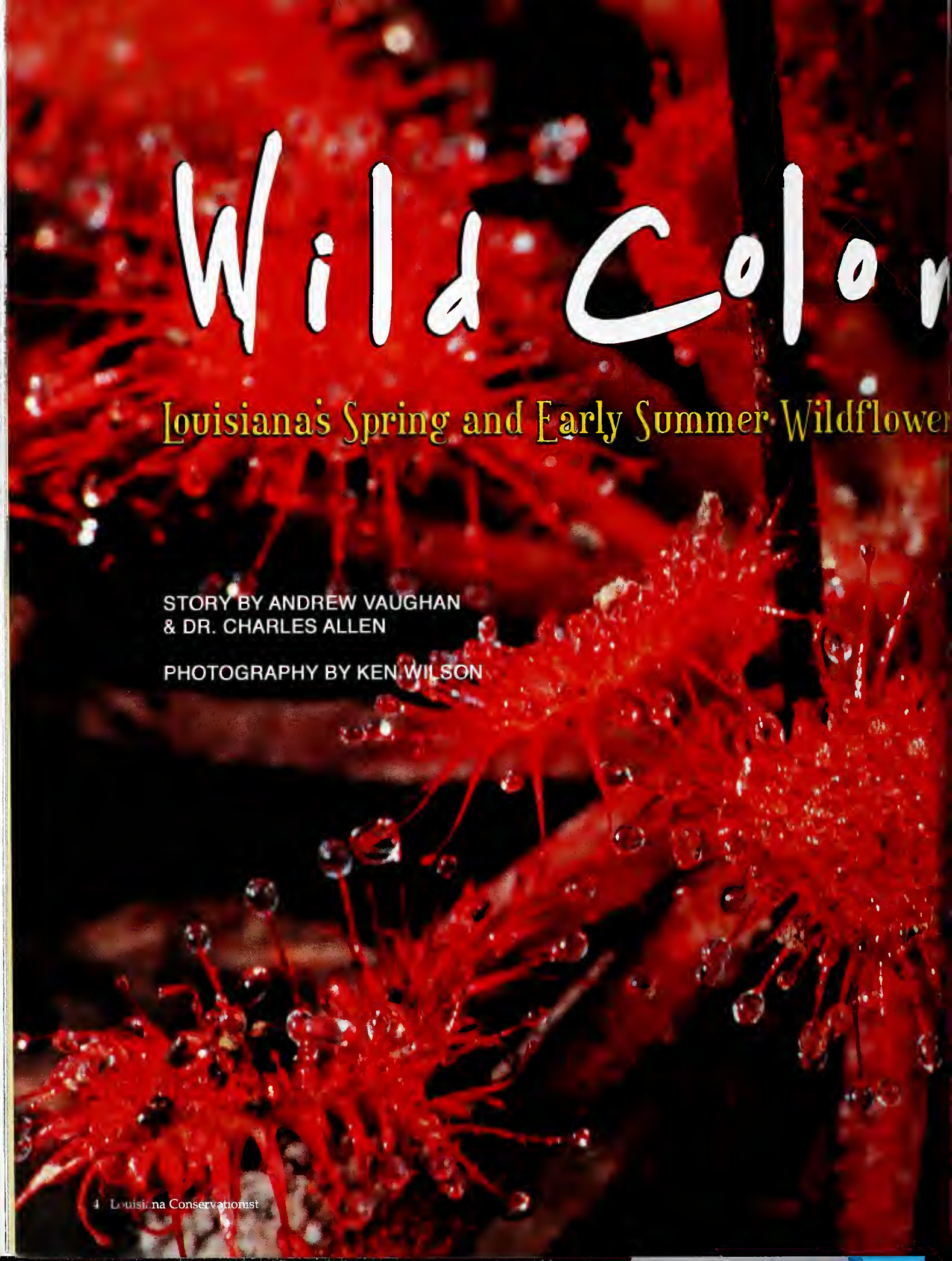


Wild Color

Louisiana's Spring and Early Summer Wildflowers

STORY BY ANDREW VAUGHAN
& DR. CHARLES ALLEN

PHOTOGRAPHY BY KEN WILSON

Spring comes early to the bayou state and while temperatures steadily rise, plants that lay dormant over the cooler months are given new life. As the season unfolds, roadsides and meadows across the state offer a dazzling floral array. By early April the cheerful blossoms of Louisiana's wildflowers celebrate the season with renewed verve.

Unlike Louisiana's fall wildflowers, which are generally contained within the grass or sunflower families, spring and early summer blooming plants are scattered across a diverse assortment of family groups. Colors range from white to yellow and blue to pink or red.

Yellow lady's slipper (Cyprepedium kentuckiense) is perhaps one of the largest and most spectacular flowers found in Louisiana at any time of year. Magnificent yellow, slipper-shaped flowers are produced in late March to early April by this orchid family member. Yellow lady's slipper grows only in mature beech forests along small, often intermittent streams or drainages leading to streams. Faced with increasing pressures from habitat destruction, limited wild populations now seem to be declining. Transplanting is risky and should be considered only as a last resort to save native populations from destruction by land clearing.

Ladies' tresses, also known as corkscrew orchid (Spiranthes spp.), is another spring-blooming orchid family affiliate. Eleven species of this genus occur in Louisiana and identification and separation can often

Shown on the previous page, sundew (*Drosera brevifola*); at right, sunnybell (*Schoenolirion croceum*); and below, prunella (*Prunella sp.*).

perplex all but the expert. Species are separated on leaf characteristics, underground parts, time of bloom, and flower color and structure. All produce fragrant white flowers with petals of some species also sporting green lines or streaks. Habitat varies from marshland and swamp to open prairies or meadows. Some species of ladies' tresses inhabit infrequently mown areas like graveyards or roadsides. Neglect to mow your lawn for a while and you may well see this orchid in late May or early June.

Famous for the pitcher plant and other insectivorous species, the acid bogs of southeastern and southwestern Louisiana also play host to a number of less well-known but remarkably attractive flowering plants. In early spring, the profuse blooms of sunnybells (*Schoenolirion croceum*) daub large areas of bog in brilliant gold. A member of the lily family, this species bears small yellow flowers in mass.

Further into spring, yellow meadow beauty (*Rhexia lutea*) provides another explosion of color. This species belongs to the *Melastomataceae* or meadow beauty family. Although many people will recognize the more widespread and common pink to purple species of this genus, they may be unfamiliar with the yellow variety specific to this acid marsh environment.

Sundew (*Drosera brevifolia*) is another insectivorous denizen of Louisiana's bog habitat but also occurs in other wet, somewhat acidic areas. This enchanting member of the *Droseraceae* family produces small red leaves that lie flat against the ground. The leaves are covered with sticky glistening hairs that ensnare insects. In spring to early summer, a single stalk rises from the leaves producing small white flowers at the top.

Heal-all (*Prunella vulgaris*) is prevalent in spring throughout the region. This diminutive mint family member (*Lamiaceae*), usually standing less than one foot in height, flourishes along roadsides statewide, producing small blue-flowered clusters. Plants branch at the base with each branch blossoming to generate a dramatic overall effect.

Later in the season, obedient plants (*Physostegia digitalis*) begin to bloom. This taller mint relative often reaches five feet or more and is confined to pine forests and prairies west of the Mississippi River. The attractive snapdragon-like pink flower clus-

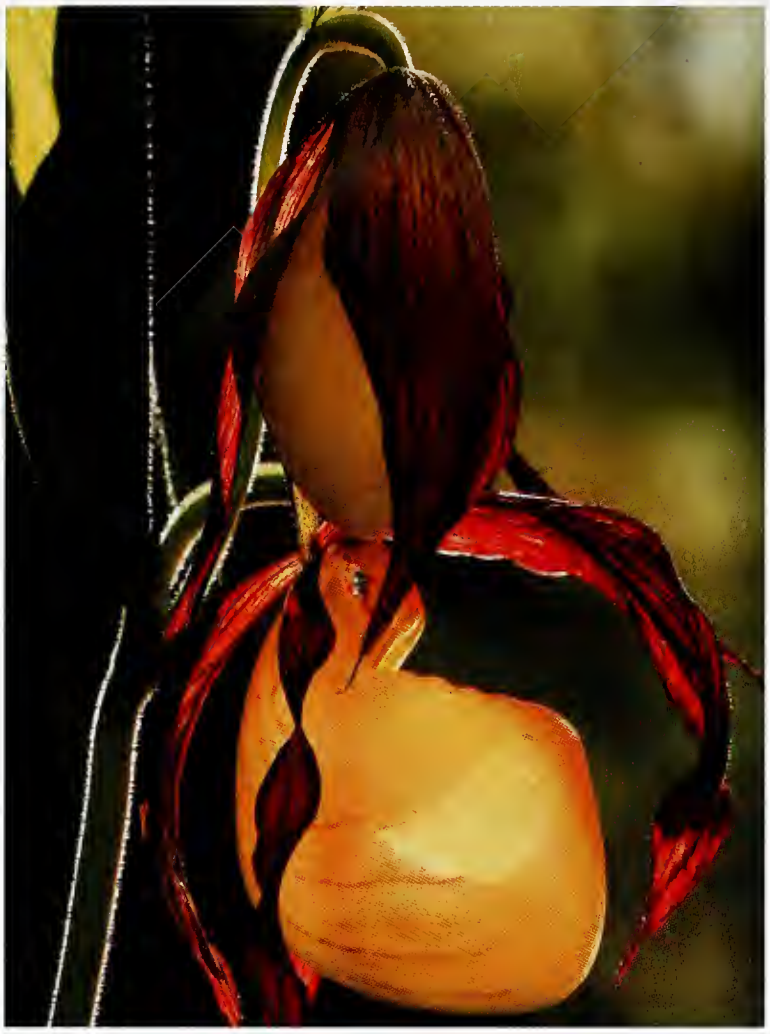
Shown above, ladies' tresses (*Spiranthes sp.*); at right, yellow meadow beauty (*Rhexia lutea*); and below right, catchfly gentian (*Eustoma exaltatum*).

ters have darker purple spots within the petals.

In wet areas and ditches across Louisiana, water hemlock (*Cicuta maculata*) loftily announces its presence with large flat-topped umbels of white flowers typical to the carrot family. This species is a host for black swallowtail caterpillars and is reputed to be highly poisonous.

Toward the close of spring, the hibiscus or rosemallow unwraps its blossom. The sizeable creamy-white to pink blooms of this strikingly showy member of the *Malvaceae* family vie for attention along wet roadside ditches throughout the region. There are several species of hibiscus in Louisiana and several closely related genera ranging widely in color within each species. Identification usually requires the examination of leaves. The most common and widespread species of rosemallow is *Hibiscus moscheutos*.

In the coastal marshes, an impressive display of spring-blooming species adds splashes of color to a canvas of wetland grasses. The catchfly gentian (*Eustoma exaltatum*) is a member of the Gentianaceae family. Its lavender florescence punctuates the otherwise green marsh backdrop. This species is largely restricted to the parishes



that border the Gulf of Mexico and is less well known than the related and similar species of *Sabatia* (rose gentians or marsh pinks).

Take time this spring to experience the incredible variety of flowering plants Louisiana has to offer. Explore the state's natural areas and enjoy the riotous color and graceful beauty of the wild – Louisiana style.

Andrew Vaughan is a former staff writer for the LCM and continues to contribute articles. Dr. Charles Allen is a Professor of Biology at the University of Louisiana in Monroe. He is a member and past president of the Louisiana Native Plant Society.

Shown above, southern lady's slipper (*Cypripedium kentuckiense*); at right, cicuta (*Cicuta maculata*).

a Clean BILL

The Rescue of an Anhinga

Photo by Michael A. Seymour

STORY BY LARRY WARD

Rarely are days' events predictable when visiting the Atchafalaya Swamp Basin. This is even more true when the visits are infrequent and happen to involve nature photography.

From the boat launch began a day that was definitely out of the ordinary. Though general nature photography was my goal, shooting the rare swallow-tailed kite was a primary objective. Previous sightings in the area indicated that prospects were better than average for filming this truly graceful bird.

As the day progressed, a variety of subjects were captured on film, yet it was not until around noon that the first swallow-tailed kites were sighted. Having traversed Gonsoulin Bayou already, it was on the return trip that not only one pair, but two pair of swallow-tailed kites appeared over the bayou ahead. With the outboard motor quickly killed, the boat drifted slowly with the current.

The kites began a brief but spectacular aerial show. As one pair continued to soar along the tree tops, the other pair swooped down just inches above the water for a short glide along the surface and then back up and around full circle for a repeat performance.

At times they came surprisingly close to the camera, closer than I had ever seen them before, enabling me to capture a few nice shots. I had to crank up the outboard once to move back up the bayou for repositioning before killing the motor and drifting again with the current. The show was nearly over though, as the kites were soon over the treetops and out of sight.

The next big event did not occur until nearly four o'clock in the afternoon. Though a good portion of the basin had been traveled, it was another ride along Gonsoulin Bayou that brought more excitement to the day. Rounding one of the many bends in the bayou, a lone female anhinga standing bankside captured my eye.

Throttling down to take a few shots of the bird, I noticed what appeared to be a piece of fish hanging near the end of her bill. What seemed unusual was that as the boat drew nearer the anhinga, she gave no sign of flight or fright. A pair of binoculars provided a

Photos by Larry Ward

Above, Ward's photo shows the anhinga with a strip of cloth constricting the movement of her bill. At left, Ward removes the cloth while the anhinga is held safely in a fishing net.

clearer image. Hanging from the anhinga's bill was not a piece of fish, but a small portion of thin threaded cloth material. In a short time it became obvious that not only was the anhinga's bill held closed with this material, but slightly open also, with some of the material wrapped between the upper and lower halves of the bill as well as around the whole thing Her efforts to claw away the material were completely futile.

As the evidence unfolded, prospects for survival appeared bleak without some form of intervention. A rescue attempt seemed to be the only option. I approached the anhinga and instead of taking flight, she attempted to avoid capture by walking in the opposite direction. Obviously in a weakened condition, the bird made her last minute escape by diving into the water. A large, long-handled dip net would aid in a rescue attempt.

Returning to the boat, I paddled from the bow in the direction of the anhinga. She eventually swam her way to the opposite

bank, with me close behind. I made a few vain attempts with the net as the bird swam along, but each time she escaped with an underwater dive.

I began to have second thoughts as my attempts were surely taking a toll on the bird's condition. Yet, without assistance, the anhinga certainly had no chance of survival. As the bird walked along the bank, I followed a short distance away with the boat, trying to figure out a solution. As I hung back, the anhinga finally stepped out onto a tree that extended horizontally over the water. A bird perched about two to three feet above the water might provide the best opportunity for capture.

Taking a gamble, I cranked the motor and throttled just enough to overcome the current and slowly close the distance to the anhinga. Leaving the wheel with the boat still moving, I grabbed the net and stepped to the bow. As the boat drew near, the anhinga crouched for a dive. Extending the net into the water just as the bird dove, I was happy and relieved to find a net full of anhinga.

Surprisingly, the anhinga was very cooperative once inside the net. While working to remove the cloth from the bird's bill, she gave absolutely no resistance. Leaving the bird in the net, which was kept positioned in the air and off the bottom of the boat, restrained its movements.

Removing the cloth, on the other hand, proved to be more difficult than expected. An anhinga's bill has small, teeth-like projections on both upper and lower halves and the thin threaded cloth was basically woven all around these teeth as well as around the bill itself. I finally had to resort to cutting away the cloth with a knife, luckily with almost no damage to the bill. I was also able to record part of the rescue on film, mostly with before and after shots.

As I released the anhinga back into the water, I could only watch her swim downstream with the current and hope that she had enough reserve strength and energy to successfully fish again and recover. My thoughts remained optimistic.

After a few moments, I started the outboard and headed downstream, spotting the anhinga a few hundred yards from the release site. She was standing on the bank just the way I found her, but this time with a clean bill and another chance at life.

Larry Ward is a radiologist technologist at the LSU Veterinary School of Medicine and a nature photographer by hobby.

So what do you do? You've found an animal tangled up in fishing line or a bird with a broken wing. Can you help? The truth of the matter is that in all too many cases, there is little, if anything, anyone can do to save these animals. The Louisiana Department of Wildlife and Fisheries gets calls like these on a fairly regular basis and while we do what we can, we simply cannot rescue every animal in distress. The Department does maintain a Wildlife Rehabilitator Program. When we receive a call about a distressed animal, we put the caller in contact with a licensed rehabilitator who may coordinate a rescue or give advice on how to handle the situation.

One should always be cautious when dealing with any injured animal. When injured, an animal that cannot escape on it's own may put up a fight. It is always best to simply leave the animal alone and contact a professional. You should NEVER put yourself at risk of injury. Remember that in nature, survival of the fittest is the rule rather than the exception.

the Buck Moth
from a Stinger to a Stunner

STORY AND PHOTOS
BY GARY NOEL ROSS

How many of you are familiar with the buck moth (*Hemileuca maia maia*)? Now, how many of you have been stung by the so-called "stinging caterpillar?" Well, the two insects are one and the same. Actually, the state's most villainous caterpillars are the young or immature stages of a very attractive, harmless adult insect that leads a complex and unusual life.

Let's begin with the name. Today we generally accept that the designation "buck moth" refers to the fact that the insects are seen only during the fall deer-hunting season. However, the situation is more complex. As a 1779 account explains "the moth is called in America the buck fly, from an erroneous vulgar notion that bucks breed its caterpillars in their heads, and blow them out of their nostrils. This opinion originates from the fly coming out in the rutting season." That's some folklore!

Buck moths are medium-sized insects. (Females are slightly larger and have more robust bodies than males). Both sexes share a similar appearance. Their wings are a kind of translucent black with cream-colored patches. These basic colors are accented by bright orange tufts of hairlike scales on the legs and tip of the abdomen. (Females are slightly less adorned). The insects occur throughout the eastern United States, at least as far west as the Great Plains, but always in association with a variety of oak-tree habitats.

Full grown buck moth caterpillars can deliver a painful sting.

Found throughout Louisiana, the insect is most common in the southern sector, including the urban centers of Baton Rouge and New Orleans where high concentrations of oak trees planted for shade provide perfect habitat. During some years, the insect reaches pest status. While most moths are nocturnal, bucks fly during the daylight hours, usually between 10 a.m. and 3 p.m., between Thanksgiving and Christmas.

The insects are rather rapid, erratic flyers. Most individuals that people observe are males patrolling for females. Males have feather-like antennae that they use to scan the air for traces of a special chemical produced only by female buck moths. Technically termed a pheromone, the chemical acts as a potent perfume or aphrodisiac that males find irresistible. Once located, the male mates with the female, usually on or near the ground.

A buck moth pupa is not enclosed within a silken cocoon but lies within ground litter or loose soil.

As an aside, one of the more intriguing aspects of buck moth biology is that male moths seem to be especially prone to entrapment by the large orb-weaving spiders common both in gardens and in wild places. The moths apparently get ensnared in the webs where they eventually become a meal. Some researchers have suggested that the spiders might actually be bamboozling the amorous males by producing an odor that mimics the female's perfume. So far, however, no chemical has been identified and the buck moth-spider relationship remains a biological curiosity.

Buck moths do not feed (their mouthparts are undeveloped). Consequently, the insects live for only a few days. There is but one drive: to sow the seeds for a single new generation the following year. After mating, the male quickly dies. Each female searches out a twig or flower stalk of a host—usually oaks, but on occasion, other hardwoods and some favorite garden ornamentals. There she lays her eggs in a tight ring. Many mated females lay only one egg ring; others lay two or even three clusters. Individual rings may contain

50-250 eggs. With her task complete, the female dies.

Eggs do not hatch right away, but instead remain through winter. In late March or April, when the first warmth of spring triggers oaks to unfurl new, tender leaves, the long-dormant eggs hatch, releasing tiny, spiny, black caterpillars or larvae. Scientists suggest that the color and coating are adaptations that allow the young caterpillars to absorb and maintain solar energy during a season that frequently experiences cool temperatures. (Remember, dark colors warm faster and spines, much like hair or fur, trap air and therefore insulate.) The tiny crawlers remain in tight groups to feed. They grow rapidly, usually shedding their skins five to six times. With each molt, the caterpillars take on an increasing mottled black-green appearance. Now, the caterpillars' infamous weapons become alarmingly obvious: long, dense, branched spines that conceal poisons capable of inflicting excruciating pain to the toughest of human skin. But of course, the spines are part of the caterpillars' defense system targeted for predators, not humans.

One of the most fascinating things about buck moth caterpillars is that the larger caterpillars tend to drop from their arboreal heights to become ground nomads. No one is quite sure as to the actual reason for this. The most plausible explanation seems to be that the wandering behavior is an adaptation that enables the voracious caterpillars to abandon their feeding clusters and to go their individual ways in search of new sources of food and eventually, ground sites to enter their next stage of development. But whatever the reason, if we carelessly step with bare feet or rub an arm or leg against one of these fully armed crawlers, we pay the price. (Incidentally, effective home remedies for relieving the pain from the sting of these caterpillars are rubbing toothpaste—paste varieties work best—meat tenderizer, or tobacco juice onto the site as quickly as possible.)

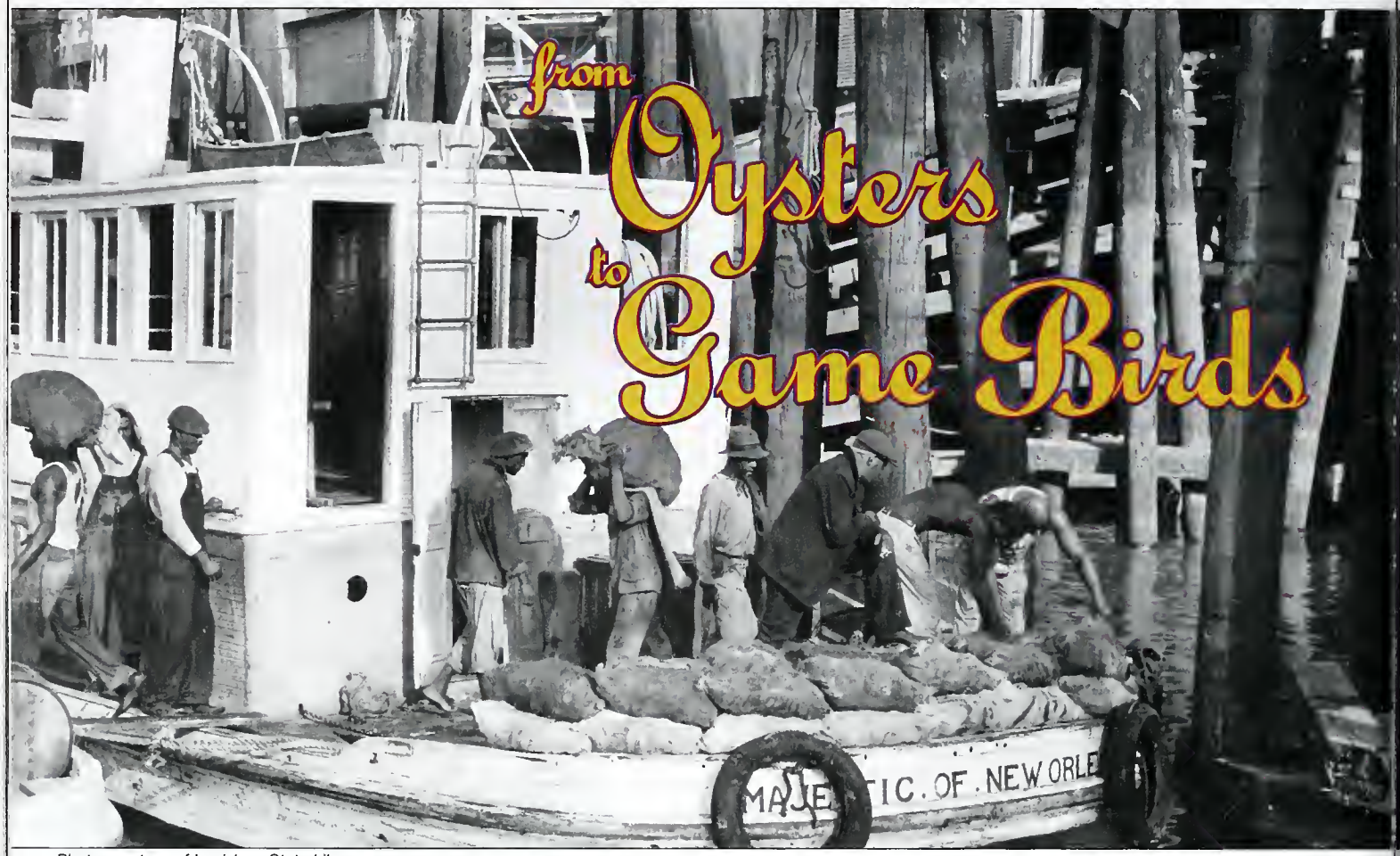
After spending approximately four to five weeks gorging on low growing vegetation (sometimes even dried oak leaves), the nomadic buck moth larva seeks undisturbed leaf litter or loose soil. There, within dark secrecy, the caterpillar sheds its skin, revealing a dark brown encasement known as a pupa. Here again the buck moth illustrates another of its interesting traits: no cocoon. Buck moths belong to a family known as silk moths. The rank and file members of this large worldwide group are famous for spinning cocoons of silk to enshroud the pupae.

Within this pupal case, the phenomenon known as metamorphosis takes place. Throughout the long summer months, all internal tissues are reorganized to form what will eventually be an adult moth. By autumn the magic is complete. The pupal skin splits and a new creation emerges from its darkened lair to become an exquisite creature of the heavens that we recognize as the buck moth. With the insect's life cycle now complete, the backdrop is set once again for the next spring's invasion of those infamous stinging caterpillars.

Male buck moths spend most of their short lives flying in search of female moths. Flight season is usually November through December.

Gary Noel Ross, Ph.D., is a retired professor of biology from Southern University and a professional butterfly scientist.

Young caterpillars cannot sting. They usually remain together in clumps, hiding beneath tender oak leaves during the day and feeding at night. Eggs (shown in the inset) are laid as a cluster (50-250) encircling a small twig.



from Oysters to Game Birds

Photo courtesy of Louisiana State Library

A History of the Louisiana Department of Wildlife and Fisheries

This feature is the first in a series outlining the history of LDWF from the 19th century to the present.

STORY BY LISA DOBSON NOLAND

The Louisiana Department of Wildlife and Fisheries is one of the oldest state conservation agencies in the U.S. Its story is rich as part of Louisiana's vibrant and famous past, due in no small part to the state's diverse cultures and unique natural resources.

LDWF's earliest legal roots are traced to 1857, when the state's legislative body, the General Assembly, passed a law designed to protect game birds in St. Bernard Parish because hunters were taking birds in population—depleting numbers. At that time, jurisdiction of the first conservation law belonged to the local police jury. By the late 1800s, this power was granted to all parishes in Louisiana. Waterfowl have been abundant residents in Louisiana because of the state's prominent role in the great winter migrations; few Louisiana citizens imagined that populations would decline from over-harvesting.

Oysters, another of Louisiana's abundant natural resources, were another vital issue in LDWF's early history. Like waterfowl, oysters have been used by Louisiana consumers for thousands of years.

According to the Louisiana Seafood Promotion and Marketing Board, Native Americans consumed all forms of shellfish of the delta wetlands. Evidenced by large heaps of discarded shells dating to 6,000 B.C., mollusks were an important food for Louisiana's aboriginal people.

By the early 18th century, when Louisiana

began to be populated with European immigrants, the mostly French, Spanish and German settlers found oysters growing naturally on reefs and gathered them for local consumption. By the next century, an ever-expanding populace and subsequent higher demand created more oyster fishermen who over-farmed the reefs and battled among themselves for prime oyster turf.

The 19th century brought oyster fishermen from all over the world. Slavonic peoples, forced out of their lands from the 1830s to 1840s came to settle in the U.S.; many of those who settled in south Louisiana coastal regions were oyster fishermen and founded the communities of Buras, Empire, Ostrica and Venice.

Photo courtesy of Louisiana State Library

Louisiana Governor William Wright Heard was in office when the Oyster Commission of Louisiana was formed in 1902.

French fishers were adept at creating artificial reefs from discarded oyster shells and seeding the beds with small oysters caught in natural reefs. The skill passed to others and as the oyster industry grew, specialized jobs developed. Croatians predominated oyster fishing and Italians worked the docks, unloading oysters and delivering them to processors. African-Americans made important contributions to the oyster processing industry.

Oyster fishing has been passed down through generations. Ralph Pausina, chairman of the Louisiana Oyster Growers and Dealers Association, is a Croatian-American who has fished the same oyster lease in Barataria Bay for 50 years. Pausina's father Baldo began working the lease in the 1930s after he immigrated from Croatia to the U.S.

Capt. Pete Vujnovich, Louisiana Wildlife and Fisheries Commission member from 1990 to 1996, has a similar background. Vujnovich, born in Croatia in 1922, came to America in 1931. His family settled in south Louisiana to begin oyster farming in Plaquemines Parish. In 1951, Vujnovich opened an oyster processing plant in New Orleans which is still in operation today.

Back in 1870, Act 18 was passed to set the state's first oyster season from Sept. 16 through March 31 each year as an attempt to conserve the seafood for the future. Passed in 1871, Act 91 shortened the oyster season by one month to appease frustrated oyster fishermen.

As the industry grew, lawmakers continued to pass legislation in an effort to conserve the resource. A law was passed in 1872 to form the Louisiana Oyster Commission, but unenforceable laws made the commission ineffective, and the depletion of oysters continued. The Louisiana Legislature passed Act 106 in 1886 in an attempt to regulate the oyster industry.

Act 106 divided Louisiana into three oyster districts with a gubernatorial appointed commissioner for each district. Oyster leases consisting of three acres of water-bottom were granted through license to allow oyster fishermen to harvest and protect their oysters. As with the 1857 game bird law, enforcement of the oyster legislation was given to local governments, making uniformity impossible, and oyster depletion continued.

The three oyster districts were abolished in

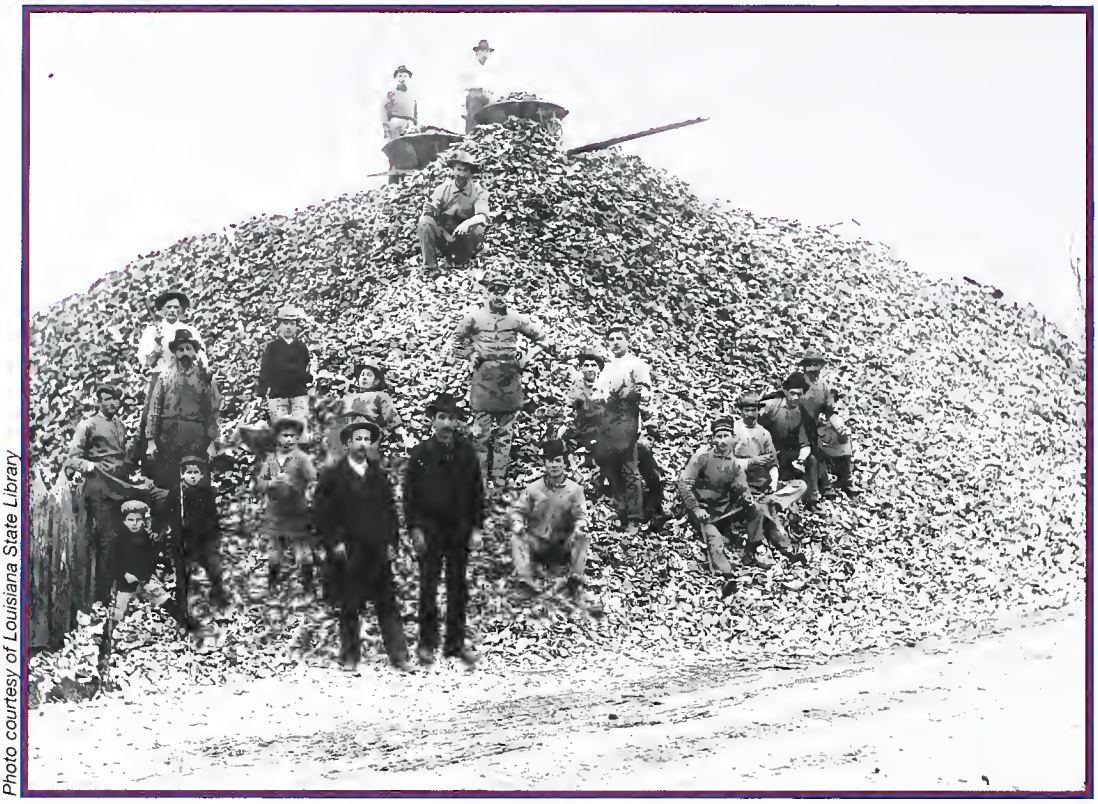


Photo courtesy of Louisiana State Library

Before effective legislation was passed, Louisiana's oyster supply was rapidly depleting.

1892 with Act 110, and each Louisiana parish had jurisdiction over parish waters, with its own oyster inspector and license. In addition, the law stipulated that only parish residents were eligible to fish their respective parish waters and the oyster leases were extended from three to ten acres. In the late 19th century, technology to mark clear boundaries was poor at best, and constant turf battles or oyster wars were waging. Act 121 of 1896 replaced Act 110, but the unenforceable law merely relieved oyster tax burdens from parish lessees.

The General Assembly appointed an oyster committee in 1900 made up of three state representatives and two state senators. The committee investigated oyster operations in Louisiana in an attempt to discover the best instruments to regulate the oyster industry and to create consistent, fair and enforceable laws. In 1902, the Louisiana Oyster Committee recommended legislation to the Assembly, which resulted in Act 153.

The 1902 act authorized Louisiana's governor, William Wright Heard, to appoint five members to the newly-formed Oyster Commission of Louisiana. The law was also based on recommendations made by U.S. Bureau of Fisheries agents H. F. Moore and T.E.B. Pope in their report, *Oyster Culture and Experiments and Investigations in Louisiana.*

According to Moore and Pope, "The fundamental feature of the new law was the creation of a state oyster commission having sole jurisdiction of oysters over the entire coast, insuring consistency and uniformity of administration, and endowed with ample police powers to enforce the laws which under the old regime were disregarded."

Heard's appointees included N. Nunez of St. Bernard Parish, B. Michel of Plaquemines Parish, F. Parra of Lafourche Parish, J. Breaux of Terrebonne Parish and T. Shannon, of St. Mary Parish. The commissioners in turn elected five officers to the commission which included Breaux as president, J. Langridge of Jefferson Parish as secretary, H. Cage of Terrebonne Parish as chief inspector, H. Smith of St. Bernard Parish as chief surveyor and J. Dymond of Plaquemines Parish as attorney. *The Plaquemines Protector* was named as the official journal of the oyster commission.

Probably the first most meaningful document in LDWF history was the *First Annual Report of the Oyster Commission of Louisiana*, which named the appointed commissioners and their duly elected officers, and further listed all those in the employee of the state's new commission with their respective salaries. More importantly, the report recommended four distinct actions for the legislature to take.

First, a law to prohibit dredging on natural reefs in shallow and unexposed waters was recommended "for the benfit of oyster fishers." The second action suggested that, "lands be leased with some limit named, but with such a liberal limit as to let any-sized firms or corporations as might desire to invest . . . you can safely trust the lessee not to do anything that would injure what is his own . . . He must be allowed to use his own

judgment and control his oyster farm as absolutely as if he were renting land from the State on which to plant cotton or cane."

The third recommendation was to add September to the open oyster season "because Texas on one side of us and Mississippi on the other both open their seasons before we do and our dealers claim they are thereby placed at a disadvantage." Finally, the last recommended measure was to abolish the tongman's license and increase the oyster tax from two cents to three cents.

Today, Louisiana's oyster production makes up 32 percent of the U.S. market. Oyster leases are still an important and controversial topic in Louisiana government; greater technology, health concerns and a global economy play major roles in oyster research and production.

While Louisianians were creating laws to protect and regulate the oyster industry, a national conservation movement was in full swing. President Theodore Roosevelt, a friend and hunting buddy of Louisiana Governor John Parker, was responsible for giving the movement top billing in national affairs. Louisiana, well-known for its great hunting opportunities, played a major role in the push for prudent use and management of natural resources.

Parker lobbied the Louisiana Legislature in 1909 to create the Louisiana Board of Commissioners for the Protection of Birds, Game and Fish. In 1910, the Oyster Commission of Louisiana merged with the new agency and a new era began.

In the next installment of LDWF's history, more wildlife legislation is passed; game wardens are given more authority; a woman leads the agency and a classic magazine is born.

Lisa Dobson Noland is an LDWF staff writer.

Photo courtesy **www.fonvillewinans.com**

"Ten Cents a Dozen," by the late Fonville Winans, depicts oyster industry honchos enjoying the fruits of their labors.

UNDERWATER *Garden*

STORY BY CLAY COLEMAN

I am an avid scuba diver. Like most avid scuba divers, I look forward to the day each month when the dive magazines arrive. The magazines are filled with stories and photos from exotic Pacific sites with wonderful names like Palau, Vanuatu, or Taveuni. I sometimes get so carried away by the promise of adventure suggested by these destinations that I actually call a travel agent or two in an attempt to visit them myself. Each time I do, I come to the following conclusions: the coolest places to dive have more vowels than consonants in their names; and I can't afford to go to any of them.

If only there was a place that offered pristine wilderness diving and the possibility of interacting with exotic marine life that did not require a stopover in Guam, a place that could be visited over a weekend at a cost of just a few hundred bucks...

Believe it or not, such a place does exist a scant 110 miles off the western Louisiana coast in the Gulf of Mexico. Known as the Flower Gardens National Marine Sanctuary and comprised of two Flower Garden Banks plus a nearby claystone/siltstone formation called Stetson Bank, the diving here is as wild and pristine as any destination in the world.

The story of the Flower Garden Banks began 150 million years ago, when salt domes began to form within a shallow sea. These domes reached their present height during the last ice age, and they form the substrate for the corals that live there today. Two separate domes form the Flower Gardens.

Known as the East Flower Garden Bank and the West Flower Garden Bank and separated by a distance of 12 miles, the two banks offer approximately 350 acres of living reef within 70 feet of the surface. They are the northernmost living coral reefs in North America.

Dive trips to the Flower Gardens National Marine Sanctuary typically begin in Freeport, Texas aboard either the *Sea Searcher II* or one of the Rinn boats, *Fling* and *Spree*. The boats leave the dock late at night to make the run to the Sanctuary while the divers sleep, and they arrive near dawn the following morning for a full day of diving. All three boats are sturdy, robust vessels originally designed for oil rig work, and they can handle just about anything the gulf can dish out. Of course, these trips are at the mercy of the weather and trips are either confirmed or aborted by early afternoon on the day of departure.

Arrival at the Flower Garden Banks will tend to shake any notion that the world is getting smaller. As the sun peeps over the horizon and the boat crew makes ready to moor at one of the many buoys permanently attached to the reef, the vista from the deck is broken only by the twinkling lights of a few distant oil rigs. The serenity borne of this kind of isolation is a palpable thing and divers quietly munch muffins or sip coffee in contemplation of the first dive. Any idea that the bustling coasts of Texas and Louisiana are but one hundred miles away seems unlikely.

The first step of the dive is a doozy. All three commercial boats require divers to enter the water by stepping off the mid-ship gunwale—a height from the water of about seven feet. It seems higher. The divers collect themselves from the impact and make their way to a granny line running the length of the boat and tied to the mooring buoy. They make their way to the mooring buoy and descend there.

Even in the early morning light, the divers can usually see the reef 70 feet beneath them as soon as they begin their descent down the mooring line. A small black-tipped reef shark may cruise by them as they settle above the reef. However, the shark has its own agenda, and it swims resolutely by the arriving bubble-blowers and continues on its way. Meadows of hard corals and sponges stretch as far as the divers can see. Beautiful platter-sized French angelfish, with white faces and black bodies, each scale trimmed in gold, swim rather fearlessly among the divers. Barracuda arrive, satisfy their curiosity, and resume their patrol over the reef. In short, the 175 species of fish that call this reef their home go about their daily routines. The Flower Garden Banks are a shallow water reservoir for many fish species more commonly found in the northern Caribbean.

A dive among healthy corals and colorful tropical reef fish is wonderful, but the Flower Gardens offer more. Pinnacles of life rising from the surrounding 400-foot depths of the continental shelf, the banks also attract large pelagic fish. In fact, they are sometimes visited by the largest fish in the world—the whale shark. Whale sharks may reach a length of 40 feet, and are a kind of moving reef themselves. Sporting a beard of remora (fish that hitch rides on larger fish by means of a suction disk on the top of their heads) and followed by a contingent of cobia, the great fish form their own biospheres. Whale sharks are plankton feeders, and they pose no threat to divers. They are nomads of the sea, and their pattern of movement around the world is as yet unclear. However, no diver who has seen one is likely to forget the encounter.

Whale sharks are not the only giant plankton feeders to be found at the Flower Gardens. Mantas, possibly the most graceful animals on earth, are more commonly seen. Measuring up to 20 feet from wingtip to wingtip, these rays may show a keen interest in divers. They seem to enjoy the bubbles that

Photo by Katherine Smith

Photo by Clay Coleman

Above, coral is almost boundless in form. Each reef takes on its own unique configuration. Below, Christmas tree worms are one of many fantastic species found at Flower Gardens National Marine Sanctuary.

Photo by Clay Coleman

divers produce, and they may approach quite closely and remain with divers for the duration of the dive. To be in the presence of these gentle floating carpets is a magical experience.

The Flower Gardens are also visited each winter by schools of scalloped hammerhead sharks. The purpose of these congregations is unclear, but they are certainly an impressive sight. Sightings of these timid but magnificent animals are virtually guaranteed to divers lucky enough to catch a lull in the winter weather that will allow a trip.

An important and amazing discovery about coral reproduction was made at the Flower Gardens in 1990 that has implications regarding the worldwide future of coral reefs. If corals kept little black books for keeping track of their love lives, each book would be exactly the same and would have only one entry: Get reproductive material to the cute coral polyp down the reef on the eighth night after the full moon in August. Year after year, on that enchanted evening, a synchronized mass coral spawning occurs throughout the entire reef system. This discovery has prompted scientists to further investigate the phenomena worldwide and has earned the Flower Gardens a prominent place in coral reproduction research.

Stetson Bank is a smaller salt dome located about 35 miles northwest of the Flower Garden Banks. The dome is topped by uplifted layers of claystone and siltstone that have eroded at unequal rates. "Moonscape" is not a word commonly used in most contexts, but the word will be spoken by at least one diver on any visit to Stetson Bank. Fluctuations of water temperature do not allow the growth of hard corals at Stetson Bank, but this unique environment is decorated by colorful sponges and encrusting corals.

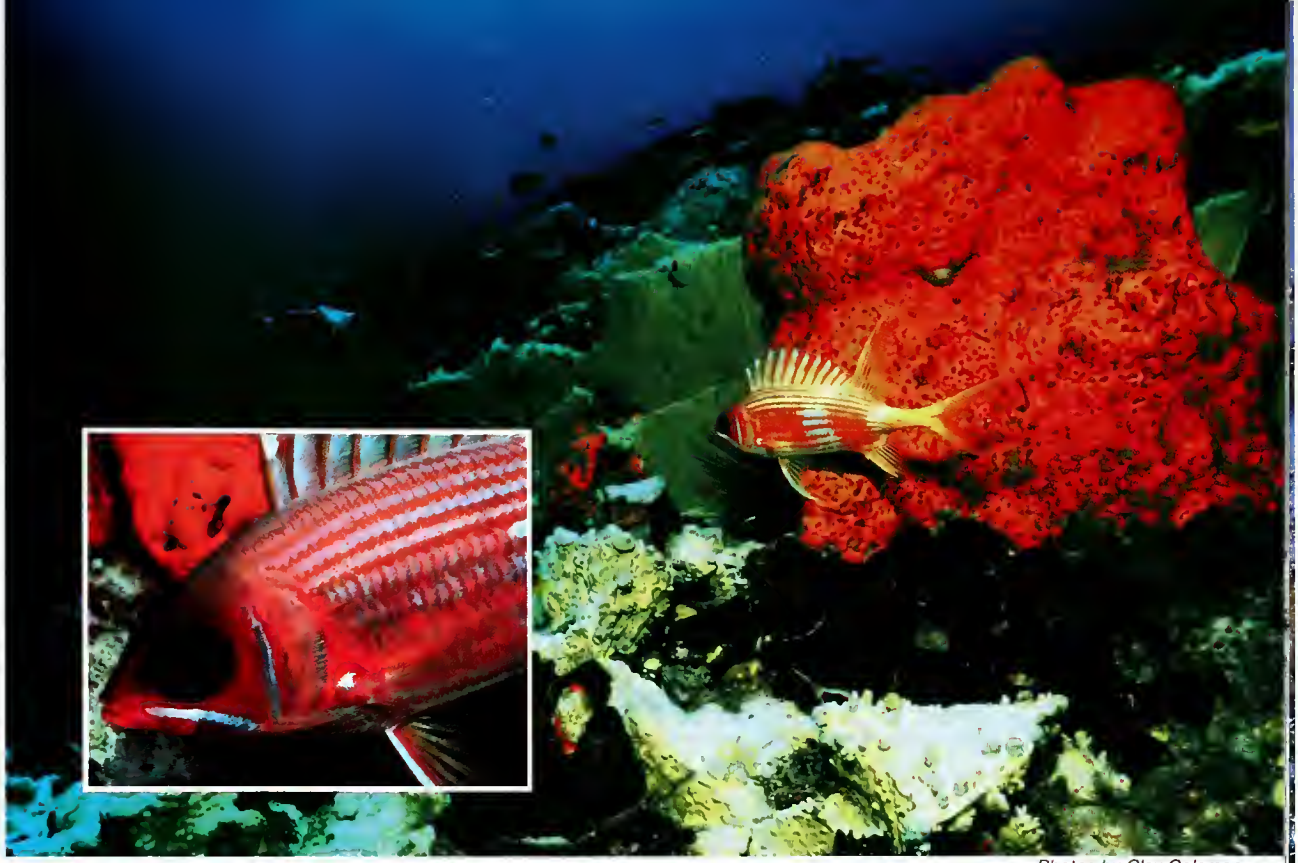
The waters of Stetson Bank are rich in luminescent plankton, and the movements of early morning divers here may create flurries of sparkling fairy dust. As the divers cruise the stark peaks and valleys of this eerie domain, they are greeted by schools of creole fish, chromis, angelfish, trunkfish, and myriad others. Spotted moray eels lurk in crevices; squirrelfish peer out from their hiding places. As with the Flower Garden Banks, the reef at Stetson Bank teems with life.

The edge of Stetson Bank makes a rather sheer drop into the liquid void to the continental shelf far below. The creatures coming

and going along this wall are a "who's who" of gulf marine life. Large amberjack, turtles, sharks, king mackerel—anything may show up, and divers stay alert once they leave the edge of the bank.

As the boat departs Stetson Bank for the run back to civilization, divers have time to reflect on where they have been. It seems impossible to Louisianians that such a world exists virtually in our back yard—a world that is closer to our coast than, say, a drive from Baton Rouge to Lake Charles. As deep water pinnacles, the banks of the Flower Gardens National Marine Sanctuary rate among the world's finest dive sites, which leaves us with this final question:

Is it a coincidence that "Louisiana" has twice as many vowels as consonants in its name?

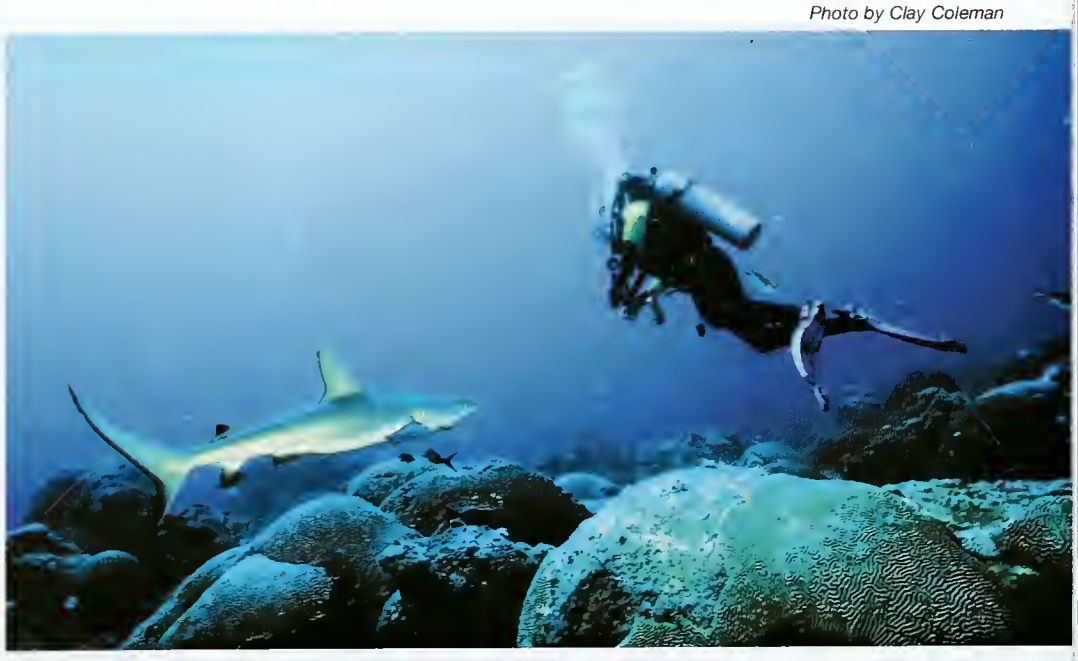


Photos by Clay Coleman

This squirrelfish blends perfectly with its environment. Inset, a close look at the squirrelfish reveals its silver stripes and silver-tipped orange scales.

Clay Coleman has been diving the waters of the Gulf of Mexico since 1973. After being admitted into the Louisiana State Bar in 1979, he worked in banking and advertising before pursuing freelance photojournalism full time.

Photo by Clay Coleman



Black-tipped reef sharks are a common sight at the garden.

American Anhinga

The American anhinga (*Anhinga anhinga*), is a large black water bird frequently seen perched spread-eagled on pilings or branches overhanging the water. The bird is often confused with the cormorant because the two birds are similar in many respects.

Like the cormorant, the male anhinga is black with a slender bill and long neck. Often called a snakebird because of its resemblance to a swimming serpent, the anhinga has a slimmer neck than the cormorant with a much longer tail. It swims with only the long, black, snaky head and neck above water and its bill is pointed rather than hooked like the cormorant's.

The male anhinga is black with white spots on the head, neck, back and wings and the female is brown on the head, neck and breast. There is a white band on the wings and tail and a green circle around the eyes. The long slender beak is orange.

The anhinga is also known as a water turkey because of its long, turkey-like tail, which usually equals the length of its body. Its plumage is fully wettable, unlike most aquatic birds. The unusual plumage and dense bones are adaptations that allow the birds to achieve neutral buoyancy in water, facilitating a slow, stalking hunting habit while submerged in shallow aquatic vegetation where they spear fish with their pointed bills. The neck bones are arranged to allow a strong and fast stab.

Photo by Michael A. Seymour

On the wing, the bird is an awesome sight in Louisiana swamps. It flies with the long tail spread fanlike and an outstretched neck.

The habitat of the unusual bird is freshwater ponds and swamps with thick vegetation, especially cypress. On low branches near the water where the bird can sun and dry its feathers. Because the plumage is wettable, there is a considerable loss of body heat underwater. The anhinga is rarely seen in winter in Louisiana, but is common in summer, especially as a nesting bird around the swamp lakes in north Louisiana. Most of the birds disappear by the end of October and reappear in spring.

Anhinga nests are made of sticks and built over the water, usually on low-hanging limbs of cypress trees. These strong fliers, which resemble a cross in flight, are a very social species and tend to nest colonially, often with long-legged wading birds. Clutch size is usually three to five eggs which are bluish white in color. The female usually lays the eggs from April through June. Hatchlings are born without plumage and appear reptilian. The fledglings, which do not attain definitive plumage until the third year, often escape from the nests into the water since they can swim before learning to fly.

Anhingas are short distance, partially migratory birds. They move regularly between summer nesting habitat in Florida, Louisiana and Mexico; current studies indicate anhingas to be year-round residents in Florida. No anhingas have been observed or recorded outside the Americas.

from our

PERSPECTIVE...

YA'LL NEED TO REDUCE MINIMUM

BY GARY TILYOU
Inland Fisheries Assistant Administrator

In my last article, I mentioned that one of the comments I often hear from fishermen is that the majority of fish they catch fall just below the minimum length limit. To respond to this comment, I need to give a quick explanation on the use of minimum length limits in fisheries management.

A minimum length limit is a management tool usually used to achieve one of two management goals. The first is to increase the number of fingerlings produced by increasing the number of reproducing adults. Most species of fish in Louisiana's water bodies produce an abundance of fingerlings. The second reason for a minimum length is to increase the number of larger fish. However, just because the majority of fish caught by fishermen are small does not imply that a minimum length is needed. First we have to remember it is normal to have more young fish in a population than older ones. Natural and fishing mortality remove fish, and the older a fish gets, the more it is exposed to these pressures. Additionally, big fish aren't always found with small ones and anglers may have to fish deeper, or in thicker cover or in different locations to find them.

If a minimum length limit would appear to be justified we still have several questions to answer. There are tradeoffs to producing larger fish. Can the water body produce the desired goal? This requires the Department to investigate water quality, habitat and forage. What is the natural mortality rate of younger fish? If natural mortality is high for small fish, few fish may reach the desired size. What is the growth of fish below the minimum? If it takes several years of protection before a fish reaches the minimum size, its chances of dying from natural and hooking mortality are increased. What is the fishing pressure on the water body? Fish in most water bodies in Louisiana are capable of withstanding a great deal of fishing pressure. If fishing pressure is low, natural mortality will be the primary force driving the population structure. What is the minimum size limit you want? In most instances, we set the minimum length limit at a size where the majority of fish have had an opportunity to spawn at least once. The growth rate of fish is also considered. Many species of fish exhibit tremendous growth up to a certain size where growth drops or levels off. If the number of pounds harvested is a primary consideration, this point of diminishing returns is important. The desires of the angling public are also considered when selecting a minimum length limit. If a majority of anglers prefer a particular length limit, and we feel it is biologically acceptable, then angler requests become part of the selection criteria.

So, what does it mean when the majority of fish caught by anglers fall just below the minimum? Is it time to reduce the minimum? Contrary to this popular belief, this situation usually implies the minimum length limit is working as intended. It is probably an indication that fishing pressure is high and fish are taken soon after reaching the minimum length limit. Reducing the minimum size limit would make some previously protected fish available for immediate harvest, but in a short period of time, the majority of the population would again fall just below the minimum. The original minimum was chosen for particular reasons and unless the management goal changes, the Department does not usually recommend changing the regulation. One exception to this is the occasion when the growth rate of protected fish is reduced. The Department periodically monitors growth rates to determine if this occurs. Remedies for such situations include removing the restriction or modifying it to protect a segment of larger fish. This can be accomplished with slot or maximum size limits.

My recommendation when you find yourself primarily catching throw-backs is to fish a different habitat or in areas not frequented by other anglers. Large fish are probably still available, but you may have fish differently or look elsewhere for them.

Photography Showcase

Natural Habitat: Nutria Trails on Big Branch Marsh
Photo by
Freeman McGlothin
Covington

Louisiana Species: Gulf fritillary
Photo by
Martha P. Mitchell
Shreveport

Louisiana Species:
Mayhaw Blossoms
Photo by
Nancy Fontenot
Lake Charles

Louisiana Species:
Barn Owl with Nutria

Photo by
Erin Martin
Lutcher

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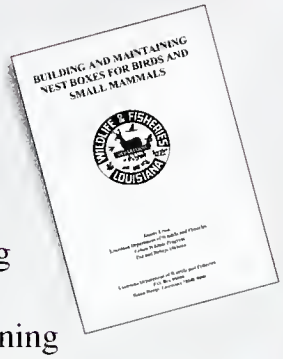

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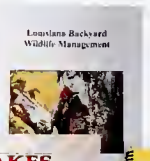

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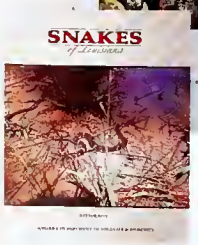

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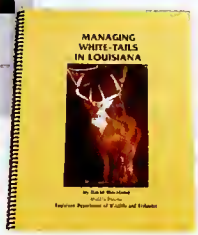

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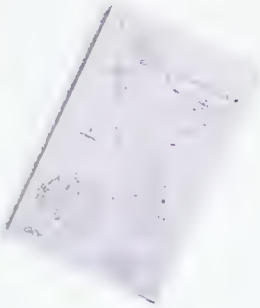

Atchafalaya Basin Map

Detailed drawing of the basin including the Atchafalaya Delta Wildlife Management Area. Specify folded or rolled.

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SHERBURNE WMA

Wildlife MANAGEMENT AREA

Sherburne Wildlife Management Area (WMA), located in the Morganza Floodway system of the Atchafalaya Basin, is situated in the lower and upper portions of Pointe Coupee, St. Martin and Iberville parishes, between the Atchafalaya River and the East Protection Levee. Sherburne WMA, Atchafalaya National Wildlife Refuge, and U.S. Army Corps of Engineers lands combined exceed 42,610 acres. The Louisiana Department of Wildlife and Fisheries owns 11,780 acres, the U. S. Fish and Wildlife Service owns 15,220 acres, and the remainder is owned by the U.S. Army Corps of Engineers. The entire area is managed by LDWF.

Sherburne WMA is classified as bottomland hardwoods with four dominant tree species groups that include cottonwood and sycamore; oak, gum, hackberry and ash; willow, cypress and ash, and overcup oak and bitter pecan. Midstory tree species encompass seedlings of dominant species along with box elder, maple, red mulberry and rough-leaf dogwood. Ground cover is generally sparse due to shading out and prolonged inundation.

Common plant species found in the understory include rattan, greenbriar, Rubus, trumpet creeper, virginia creeper, poison ivy and milkweed. Much of the area supports a lush stand of fern.

Deer, turkey, waterfowl and squirrel are abundant in the area and offer good hunting opportunities. Rabbit and woodcock are also present and hunting for those species is fair.

Ongoing land acquisitions, together with continued land development and land management will improve access, habitat, wildlife populations and public use of Sherburne WMA.

Camping is permitted on two designated areas of the WMA. A shooting range complex consisting of rifle, handgun, skeet, trap, and archery is also available for public use. The rifle and handgun ranges are open daily and skeet and trap are available by appointment.

The area may be accessed via Louisiana Highway 975, which connects with Highway 190 at Krotz Springs on the north, and Interstate 10 at Whiskey Bay on the south.

Entrance to the interior of the area is possible through a series of oilfield roads, ATV trails, and Big and Little Alabama Bayous. There are two private boat launches on the northern portion of the area, and two public launches, one on Big Alabama, and one on North Little Alabama.

Additional information may be obtained from the Louisiana Department of Wildlife and Fisheries at 5652 Hwy 182, Opelousas, LA 70570. Phone (337) 948-0255 or (337) 566-2251.

LAW lines

BY MAJOR KEITH LACAZE

HOW AND WHEN TO CONTACT A WILDLIFE AGENT

Anyone who hunts, fishes, boats or is involved in any other type of outdoor related activity will at some point need to contact a wildlife agent. It may be for information, to report a violation or for assistance in an emergency. How does someone reach Wildlife and Fisheries Enforcement? Unlike local fire, emergency and police services, wildlife agents are not available via 911, but we are easily contacted in a number of ways.

Louisiana has nine LDWF Enforcement region offices in the state. The offices are open Monday through Friday from 8 a.m. to 4:30 p.m. A wildlife agent may be contacted through the region office during the business day. The region offices and the locations and phone numbers are as follows:

Region 1 Minden 318- 371-3049
Region 2 Monroe 318-362-3139
Region 3 Pineville 318-487-5634
Region 4 Ferriday 318-757-3072
Region 5 Lake Charles 318- 491-2588
Region 6 Opelousas 318-948-0259
Region 7 Baton Rouge 504-765-2999
Region 8 New Orleans 504-568-5616
Region 9 Thibodaux 504-447-0821

Enforcement Division Headquarters is located in Baton Rouge at 504-765-2989. This office also operates Monday through Friday from 8 a.m. to 4:30 p.m.

After hours and weekend calls are handled by the Enforcement Division's Communications Center located at Headquarters in Baton Rouge. Phones in the region offices and headquarters office are not manned after work hours and on weekends. The Com. Center or Dispatch is manned around the clock, seven days a week. Two toll free numbers are provided for public contact. 1-800-442-2511 is the in state Operation Game Thief hotline. 1-800-256-2749 is the out-of -state number. Both may be used to report violations are to obtain information or assistance. A third number, 1-800-268-7853 is provided for Boating Safety information including scheduled classes and locations. The Baton Rouge local number for Dispatch is 765-2706. The Operation Game Thief hotline number is printed on hunting and fishing regulation pamphlets, hunting and fishing license carriers and several other Department publications.

Dispatch and the region offices have radio contact with wildlife agents on duty. Radio contact is statewide and all agents monitor both Dispatch and their regional patrol frequency. The radio system is state-of-the-art and has reduced response time to in progress violations and emergency assistance calls.

Many wildlife agents also have radio contact with the local sheriff's office or provide telephone numbers to local law enforcement agencies so they can be quickly reached when needed. Most agents have home telephone numbers listed in the public directory, though they are not required to do so. Some provide people in their patrol district with a home telephone number, especially if the person lives in an area plagued with poaching.

Now that we know how to contact Wildlife Enforcement, let's discuss when it is necessary. If someone is witnessing a wildlife or fish violation in progress, time is critical. Get to a phone as quickly as possible and call Dispatch using the 800 number. Be prepared to give the nature of the violation, an accurate location, descriptions of the people involved, vehicle or boat descriptions and license or registration numbers. The information will be radioed to the nearest agent on duty. If the violators leave the scene, give the direction of travel. Leave a call back number if possible, in case the agent assigned to the call needs more information.

In situations where someone discovers evidence of a violation or has information about a recurring violation which is not in progress at the moment, it is still a good idea to call and report the information quickly. If the caller knows a likely suspect or has some idea about when the violation may occur again, report it. For example: A group of hunters return to camp and hunt in the same area nearly every weekend during deer season. After they leave on weekend someone discovers evidence of an illegal deer kill or other violation. The information should be reported. The wildlife agent can arrange to set up surveillance on the group or check them the next weekend and stands a good chance of making an arrest if they habitually violate the law.

If hunters or fishermen have questions about regulations, they can call Dispatch or their local region office for more information or an explanation. It is a good idea to call the Department for a complete explanation of any regulation which causes confusion or if someone is not sure what season dates apply to their hunting area. This is particularly true of deer and turkey hunting areas, shrimping zones and freshwater/saltwater designations.

The most critical time for quick contact with the Department is when emergency assistance is needed. Search and Rescue is a major function of the Enforcement Division. Wildlife Agents are often the only law enforcement personnel familiar with remote areas and confusing networks of waterways and are trained in search and rescue techniques. If someone is overdue for return from a hunting or fishing trip beyond a reasonable length of time, don't hesitate to call for help. Our record for locating lost or stranded outdoorsmen is very good and several lives have been saved by agents finding people before exposure to the elements could claim more lives.

Public service and assistance are a very important part of Wildlife and Fisheries Enforcement. We strive to provide the best wildlife law enforcement has to offer and are just a phone call away.

CONSERVATION notes

LA. HAS SAFEST HUNTING SEASON EVER IN 2000

The Louisiana Department of Wildlife and Fisheries reports that 2000 was the safest hunting season on record in Louisiana. For the first time since LDWF has collected data on hunting-related firearm accidents, there were no firearm related fatalities.

"Hunter safety works," noted LDWF Hunter Education Coordinator Bud Carpenter. "Since 1970, Louisiana has trained 450,000 students in the basic hunter education course with 20,000 students trained annually since mandated state laws took effect in 1984. We have seen a steady decline in firearm accidents from a high in 1983 with 46 accidents and 18 fatalities compared to the 2000 hunting season where only seven firearm related accidents were reported with no fatalities. For the ten year period from 1981 to 1990, there were 291 hunting accidents compared to 1991-2000 when accidents declined to 146, a 50 percent reduction."

Responsible and safe firearm ownership is alive and well in Louisiana. When one considers that 300,000 hunters take to the woods, lakes and fields each year spending millions of man-hours with loaded firearms, an injury rate of 2.3 per 100,000 participants is unequaled in any other outdoor activity, according to Carpenter.

Hunter safety eduction classes, are free of charge and posted regularly on LDWF website: http://www.wlf.state.la.us.

SPRINGTIME: A TIME FOR NESTING

LDWF offers a book to wildlife enthusiasts on building and maintaining nest boxes for birds and small mammals according to Jimmy Ernst, LDWF wildlife biologist..

While the book points out that having a nest box in the yard is a great way to teach children about nature and wildlife, Building and Maintaining Nest Boxes for Birds and Small Mammals will appeal to anyone interested in wildlife viewing around the home. The 34-page book contains habitat information for 18 animal species, with detailed, how-to instructions, as well as patterns and illustrations. The book points out, there are about 24 species of birds in Louisiana that nest in cavities and most of those will use artificial nest boxes.

The plans in the LDWF book are simple designs that require only a minimal amount of technical know-how to build. The book is available at LDWF headquarters at 2000 Quail Drive in Baton Rouge at a cost of $2.50 to cover the cost of printing, and any applicable sales tax. For more information, contact the LDWF library at 225/765-2934.

NEW MINIMUM STANDARD FOR TROPHY DEER

Beginning with the fourth Louisiana Big Game Recognition Program for 2001-2003, the new minimum standard for a gun killed deer will be 130 for the typical category and 165 for the non-typical category. According to LDWF deer study leader David Moreland, the new standard of 130 fits the definition of what hunters believe a trophy deer looks like.

A good eight point with a 16 inch inside spread, 20 inch main beams and four inch bases can score 130. Minimum standards for the bow and muzzleloader categories will remain the same.

Moreland.noted "There are standards which have been established that define a trophy deer. A major part of this definition concerns the weapon used by the hunter to bag the deer. Since it is somewhat easy to reach out and touch with a modern firearm, the minimum standard established which defines a gun killed trophy is much greater than that of a deer taken with bow and arrow."

In Louisiana, the minimum standard for a gun killed deer for qualification in the Louisiana Big Game Recognition Program was previously 150. The minimum standard for a bow killed trophy was 90. All habitat types in Louisiana are capable of producing a buck that will score 100 points, consequently, all of the state is capable of producing trophy deer.

A deer that scores 150 points is truly one with a large set of antlers. Because many quality deer are harvested each year in the state that do not score that high, it has been requested that the minimum score for a gun killed deer be reduced so that more of these fine bucks can be recognized.

This new minimum standard will increase the number of trophy deer killed in the state each year. Much of the habitat in Louisiana is capable of producing deer according to Moreland.

COWBIRDS, BLACKBIRDS FOUND DEAD

Since February, the Louisiana Department of Wildlife and Fisheries Natural Heritage Program has been receiving reports of dead cowbirds and blackbirds from throughout south Louisiana. Preliminary reports indicate the culprit may be pesticide poisoning.

Reports of dead birds have come from Baton Rouge, Hammond, Lafayette, New Orleans and other south Louisiana locations. LDWF sent some of the dead cowbirds to the National Wildlife Health Center lab in Wisconsin where preliminary findings indicated pesticide poisoning. The LSU Veterinary School is also testing some of the dead birds for West Nile Virus. LDWF will issue more information as it evolves.

LDWF PUTS WILDLIFE VIOLATORS ON THE RUN

If you owe money to LDWF from a previous wildlife violation, look out - they are looking for you. And they are using every search method available, including the assistance of the current legislative session.

LDWF has implemented several diverse and innovative collection initiatives in an effort to collect all outstanding civil penalties. While LDWF personnel work daily at the task of collecting Class One fines, past efforts have been limited. "We've asked the legislature to give LDWF some additional tools that we need to collect these fines more effectively," noted LDWF Undersecretary James L. Patton.

The denial of recreational hunting and fishing licenses is one of several innovative methods already put into motion, made possible by LDWF's electronic license sales system. "With the electronic system," Patton said, "we can identify a prospective purchaser in real-time." In conjunction with this, state Rep. William Daniel has pre filed legislation that would enable payment of Class One fines through any of the more than 1,000 electronic vendors throughout the state. This measure would give the opportunity to settle up on the spot, as well as offer the convenience of local, seven days per week payment of fines, without the headache of getting a bank check or money order. costs of judiciary hearings, require payment of attorney's fees and court costs related to lawsuits filed by LDWF, and make the citation sufficient notice that fines and costs must be paid in full before restoration of hunting and fishing privileges.

TAKE AN LDWF SAFE BOATING CLASS

Louisiana boaters who travel our bayous, bays, lakes, rivers and the Gulf of Mexico can feel a great sense of pride for the great wealth of resources available in our state. Louisiana encompasses more than four million acres of water available to boaters, allowing numerous opportunities for water-related activities. As the demand for the recreational use of Louisiana's waterways increases, it becomes more and more important for boaters to be safe, knowledgeable and responsible.

All boaters must commit themselves to learning and practicing the fine points of safe watercraft operation. The Louisiana Boating Basics course has been prepared to provide recreational boaters with advice and information on safe and proper boat operations. Boating accidents in Louisiana have increased by 20 percent from last year thus far.

The LDWF offers a boating basics class that lasts between six to eight hours and is usually completed in a day. The course includes information on choosing a boat, classification, hulls, motors, legal requirements and equipment requirements, many navigation rules, navigation charts, trailering, sailboats and related subjects that include canoeing, personal watercraft and more.

The course is approved by the National Association of State Boating Law Administrators and is recognized by the United States Coast Guard. Successfully completing the course will generally reduce the premiums for boat insurance policies by 20 percent. Take a boating safety class and invite your family and friends to attend with you. Boating classes are scheduled throughout the state.

LWF COMMISSION ADOPTS FISHING WEEK RESOLUTION

The Louisiana Wildlife and Fisheries Commission declared the week of June 1—10 as "Fishing Week" in Louisiana at the April 5 meeting. The week coincides with National Fishing Week. In appreciation of the estimated 900,000-plus anglers in the state, no recreational fishing licenses will be required of residents or non-residents who celebrate the occasion the weekend of June 9 - 10.

LWF COMMISSION ADOPTS RESOLUTION ON LA-MS COMPROMISE

The Wildlife and Fisheries Commission adopted a resolution at its regular monthly meeting April 5, that addressed the recent compromise between Louisiana and Mississippi on non-resident hunting and fishing licenses. The resolution was presented as a tool to express the commission's concerns regarding revenue loss and the well being of the agency, not as a means to oppose the compromise as stated by the Associate Press shortly after the meeting.

At the meeting Sen. Romero provided a recount of the history and reasoning behind the compromise. The presentation was well received and discussions followed between the two parties regarding the loss of revenue from the department and the need to replace it. The resolution clearly stated the commission's support and opposition to portions of the compromise, clarifying the need for the Legislature to review "replacement of potential lost license revenue with revenues from other funding sources, including the redirection of revenues from appropriate existing funding sources". The commission's concerns for the agency's future and the need to resolve the non-resident license fee issue was clearly conveyed during the meeting.

The WLF Commission and Secretary Jenkins will keep regular dialogue with Sen. Romero regarding the compromise. Romero plans to attend regular Wildlife and Fisheries department legislative briefings to insure this.

Letters to the Editor are welcomed. Our e-mail address is LCM@wlf.state.la.us and our fax number is 1.225.763.5491. Letters should include the writer's full name, address and home telephone and may be edited for purposes of clarity and space.

Letters to the Editor

I just received my *Louisiana Conservationist* and really enjoyed the article "License for the Good Life." I have all of my hunting and fishing licenses and duck stamps from the time I was 16 years old. Last hunting season was the first time I did not have to purchase them as I am over 60 years old.

I also enjoyed the photograph of Wham Brake. I have been hunting in Wham since 1957, and regularly since early 1960. We have had a blind in the same location since 1978 and have seen a lot of changes in the brake. We still get quite a lot of ducks, but due to farming changes, the ducks do not stay in Wham.

Just an added note, we saw two bald eagles, several ibises and nearly 200 white pelicans along with all species of ducks geese and coots in Wham this past season.

I am 61 years old and those were the first bald eagles seen in the wild by me.

Keep up the good work LDWF.

JOHN BECTON
West Monroe

First, thank you and the staff of *Louisiana Conservationist* for continuing a long tradition of outstanding work for the people of Louisiana. I read with great interest and excitement about the upcoming changes discussed in Sec. Jenkins' comments in the March/April issue.

Second, it was great to see my older cousin Woodrow Prudhomme featured in that issue. He is a legendary sportsman in the Bermuda/Natchitoches area.

Finally, a correction is in order: on page 20 under "How We've Changed." It states that in 1963, "The editor was Claude H. Gresham."

This is incorrect. My father, Steve Harmon, was editor of the *Louisiana Conservationist* from 1956 to 1968 and was also Education and Publicity director of the LWFC at the same time. He and his staff produced the magazine from 400 Royal Street in New Orleans. My father designed the look and layout of every issue of the magazine during those years. The issue he is most proud of was the first color cover in 1967 which is featured in the time line on page 20 of the March/April 2001 *Louisiana Conservationist*.

I know you and your staff are proud of the distinctive and award winning heritage of the *Conservationist* and would want to give proper credit its due. Though in his 80's, Daddy still receives and reads with great pride and memories every issue the *Conservationist* and would make a wonderful resource for anyone interested in the "glory days" of funding of the Wildlife and Fisheries Commission and its programs.

JAY HARMON
Baton Rouge

Photography Showcase

Our photo showcase displays photographs submitted by our readers. One photograph from each category is selected by our staff and showcased in each issue. This is not a contest but a selection of photographs that show originality, uniqueness and creativity. Selected photographers will receive a Louisiana Conservationist one-year subscription gift certificate which can be used to start a new subscription, extend an existing one or given as a gift.

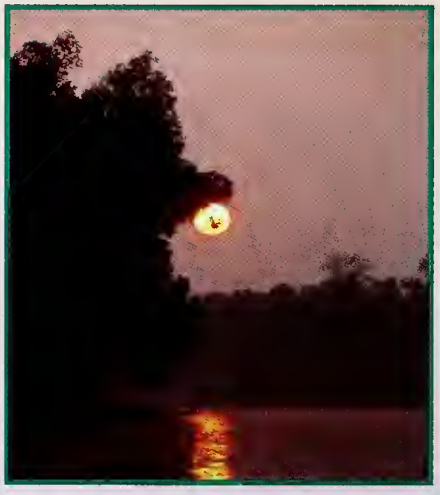
DEADLINES

January 1, March 1, May 1, July 1, Sept. 1
All photographs will be returned.

GUIDELINES

All entries not following the guidelines will be returned unused.

1. Anyone who can operate a camera can enter. *Wildlife and Fisheries employees and immediate family members are not eligible.*
2. Black and white, color transparencies and color prints are acceptable. All prints must have an accompanying negative. Do not cut the negative, send the entire strip .
3. Prints must be mounted on sturdy poster or matt board.
4. Name, address, phone number and age must be included with or written on each entry. Unlabeled entries will be returned unused.
5. Include a description and location of each photograph. Specify appropriate category.
6. Only first time published photographs should be submitted.



CATEGORIES

A. Natural Habitats: scenic shots of Louisiana. These may or may not include wildlife or people.

B. Louisiana species: native species of Louisiana. This includes plants and animals.

C. People in Nature: People involved in outdoor activities other than hunting and fishing.

D. Hunting & Fishing: People enjoying Louisiana's oldest outdoor sports.

C'est Bon!

from the

Official Louisiana Seafood and Wild Game Cookbook

Trout in Crust

1 speckled trout, whole
8 oz. puff pastry or 1 pkg. crescent roll dough
2 Tbl. butter
2 Tbl. mushrooms, finely chopped
2 Tbl. celery, finely chopped
3 Tbl. crabmeat
3 Tbl. cooked shrimp, finely chopped
salt and pepper

Preheat oven to 350 degrees. Clean trout and pat dry. Melt butter in pan and brown the trout on each side. Remove from pan and saute mushrooms and celery. Add crabmeat, shrimp and seasonings and saute for an additional two minutes. Fill the trout with this mixture. Roll the dough very thin and wrap around middle section of trout, leaving head and tail exposed. Bake until done and pastry is golden brown, about 10-15 minutes. Pour hollandaise sauce over the middle section of the trout and serve immediately. Serves one. Increase accordingly.

Hot Pepper Jelly

1/4 cup hot peppers (ground)
1/4 cup bell peppers (ground)
6 1/2 cups sugar
1 1/2 cups apple cider vinegar
1 bottle Certo

Mix peppers, sugar and vinegar in a large saucepan. Heat to boil and boil for one minute. Cool for 10 minutes. Stir in one bottle Certo and boil hard one more minute. Pour into hot sterilized jars and seal.

Shrimp Stuffed Tomatoes

2 baskets cherry tomatoes
1 green onion, chopped
2 hard boiled eggs, finely chopped
dash of liquid hot pepper
1/2 lb. cooked cleaned shrimp
6 or 8 pitted black olives, chopped
salt and pepper

Wash and drain tomatoes. Cut a thin slice off the top of each and scoop out the pulp. Set aside to drain. Chop the shrimp very fine and combine with the onion, olives, eggs and seasoning. Stuff the mixture into the tomato shells and refrigerate.

Homemade Fruit Sherbert

3 mashed bananas
juice of 3 oranges
juice of 3 lemons
1 sm. bottle red cherries, drained
1 lg. can crushed pineapple, drained
2 cups sugar
2 quarts milk
1 pint whipping cream
1 tsp. vanilla

Mix fruit and sugar until dissolved. Chill for 30 minutes. Add cream, milk and vanilla. Freeze in ice cream freezer.

Photo by David Humphreys